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Electrokinetic remediation of heavy metal-polluted soil faces different challenges in relation to implementation. One challenge is to cope with the nonlinear and transient geochemical changes in the soil and another is to increase the remediation rate. Both these challenges are met when treating the soil in a suspension in an electrodialytic cell. The soil suspension is stirred and uniform during treatment. Previously, it has been shown that a faster remediation can be obtained when remediating a stirred soil suspension compared to a stationary water saturated soil (all other parameters the same). The present work shows that the method for treating stirred suspensions was robust in the sense that in 1–3 weeks, three of four soils were decontaminated from heavy metal concentrations, where the soils must be deposited to concentrations where the soil can be allowed used for some purposes in Denmark. From the fourth soil of the investigation, 92 % Pb was removed during 14 days, but as the initial concentration was very high (33.6 g Pb/kg), the final concentration was still high and the soil maintained classified where there are no reuse options in Denmark, so optimization of the treatment for this soil is necessary to meet the goal. The good results were obtained even without optimization of processing parameters, but the investigation underlined that the optimal parameters are highly soil and pollution specific.

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